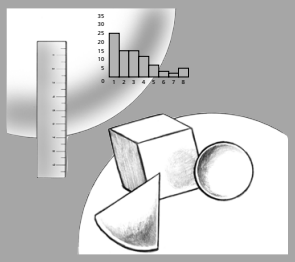
Wisconsin Knowledge and Concepts Examinations
Criterion-Referenced Test

Released Item Book

Mathematics



Grade

6

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Wisconsin Knowledge and Concepts Examinations—Criterion-Referenced Test (WKCE-CRT)

Released Item Book

What are released items?

The items in this book are actual items from the fall 2005 state assessment, the Wisconsin Knowledge and Concepts Examinations—Criterion-Referenced Test (WKCE-CRT). These items will not be used again on the state assessment and may, therefore, be used in Wisconsin for professional development, improving instruction, and student practice. The items in this book illustrate the formats and kinds of items that students will encounter on the WKCE-CRT.

How do I use this book?

Professional Development

Released items are useful as educators engage in conversations about what students are expected to know and be able to do to demonstrate proficiency on the state assessments relative to the state model academic standards. Released items can inform discussions about state and local standards, curriculum, instruction, and assessment.

Improving Instruction

Teachers may use released items in classroom activities that help students understand how to:

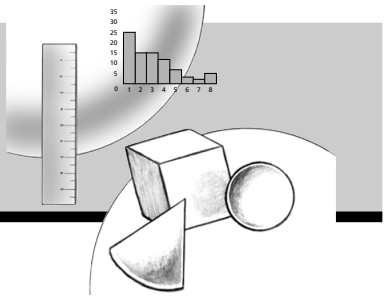
- solve problems
- determine which answer choices are correct, which are incorrect, and why
- respond to constructed response items with complete, thoughtful answers
- approach long and/or multi-step tasks
- use good test-taking strategies.

Student Practice

Students may perform better and with less anxiety if they are familiar with the format of the test and with the types of items they will be required to answer. See the accompanying guide for instructions on administering the released item book as a practice test and for the answer key. Note that a student's score on the practice test cannot be converted to a scale score, used to predict performance on the operational WKCE-CRT, or used to make inferences about the student's learning.

Mathematics

Session 1



1 Look at the equation below.

$$72 \div \square - 3 = 6$$

What value belongs in the box?

Ⓐ 8

Ⓑ 9

Ⓒ 12

Ⓓ 24

2 Which of these is equal to 4,035?

Ⓐ 400 + 30 + 5

Ⓑ 4,000 + 30 + 5

Ⓒ 4,000 + 300 + 5

Ⓓ 4,000 + 300 + 50

3 $(6 + 3) \times 2 =$

Ⓐ 11

Ⓑ 12

Ⓒ 18

Ⓓ 36

4 Cameron baby-sits his brother 4 hours every Saturday. If Cameron baby-sits his brother on 12 different Saturdays, how many total hours does he baby-sit?

Ⓐ 3 hours

Ⓑ 16 hours

Ⓒ 46 hours

Ⓓ 48 hours

5
$$\begin{array}{r} 493 \\ -\ 326 \\ \hline \end{array}$$

Ⓐ 163

Ⓑ 167

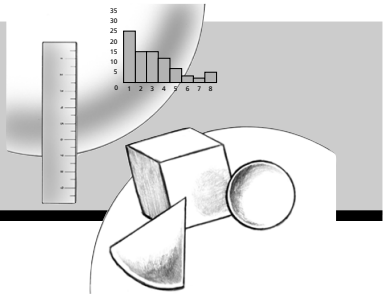
Ⓒ 173

Ⓓ 177

STOP

Mathematics

Session 2



6 Look at the equation below.

$$4 \times (\square + 2) = 4 \times 12$$

What is the value of the missing number?

Ⓐ 3

Ⓑ 6

Ⓒ 10

Ⓓ 12

7 Look at the pattern below.

1, 5, 9, 13, . . .

What is the eighth number in this pattern?

Ⓐ 17

Ⓑ 23

Ⓒ 29

Ⓓ 31

8 A tree is 66 inches in height. What is the height of the tree in feet?

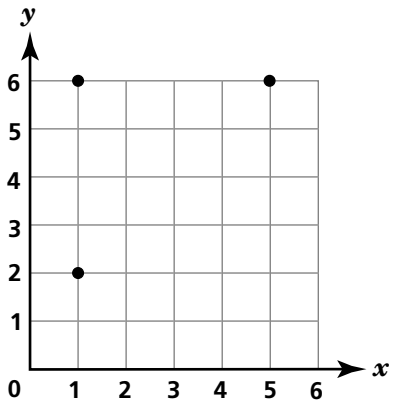
Ⓐ $5\frac{1}{2}$ feet

Ⓑ $5\frac{3}{4}$ feet

Ⓒ $6\frac{1}{4}$ feet

Ⓓ $6\frac{1}{2}$ feet

9 Look at the grid below. The location of three corners of a square are shown.



Which ordered pair represents the fourth point of the square?

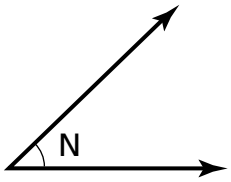
Ⓐ (2, 5)

Ⓑ (5, 2)

Ⓒ (4, 0)

Ⓓ (0, 4)

10 Look at angle N shown below.



Which of these best describes angle N?

Ⓐ right

Ⓑ acute

Ⓒ obtuse

Ⓓ scalene

Go On

11 Geoffrey had a 10-dollar bill. He bought three ice cream cones. Ice cream cones cost $1.78 each, including tax.

Step A

How much change did Geoffrey receive?

Answer: $ _____

Step B

Use what you know about money/decimals to explain how you determined the amount of change Geoffrey received. Use words and/or numbers in your explanation.

_____

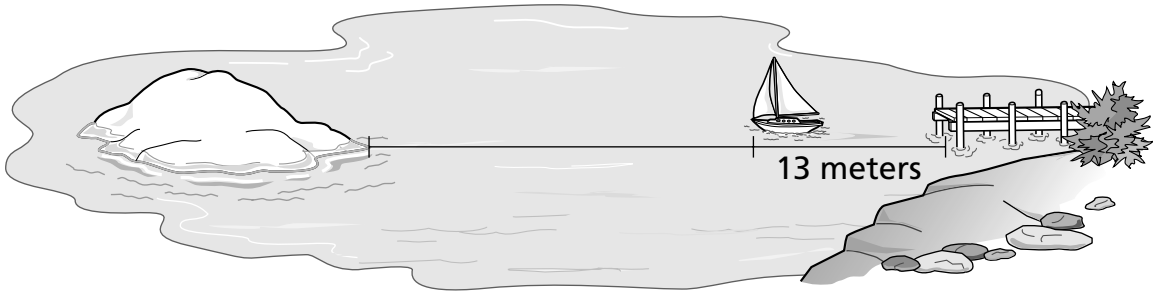
_____

_____

_____

_____

12 The boat below is 13 meters away from the dock.



About how many more meters does the boat need to travel to reach the island?

Ⓐ 13 meters

Ⓑ 26 meters

Ⓒ 39 meters

Ⓓ 52 meters

13 Bethany is using a spinner that has 9 equally spaced sections. There are 5 sections that have a star on them. The remaining sections do not have a star on them. When Bethany spins the arrow, what is the probability that it will not land on a star?

Ⓐ $\frac{4}{5}$

Ⓑ $\frac{4}{9}$

Ⓒ $\frac{5}{4}$

Ⓓ $\frac{5}{9}$

Go On

14 Look at the set of numbers below.

0 5 2 3 7 9 2

What is the mode of this set of numbers?

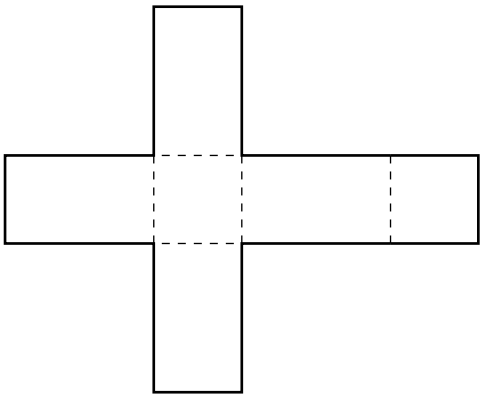
Ⓐ 2

Ⓑ 3

Ⓒ 4

Ⓓ 9

15 Look at the net (flat pattern) below.



If the net (flat pattern) is folded, which geometric shape is created?

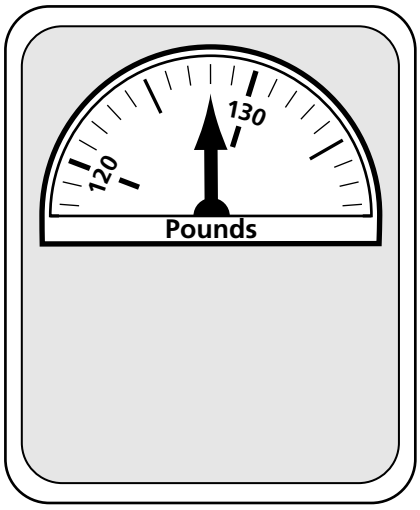
Ⓐ rectangular prism

Ⓑ cube

Ⓒ rectangular pyramid

Ⓓ triangular prism

16 Look at the scale below.



What is the weight shown on the scale?

Ⓐ 123 pounds

Ⓑ 125 pounds

Ⓒ 128 pounds

Ⓓ 130 pounds

17 **Step A**

Design a closed shape that has exactly one line of symmetry. Show the line of symmetry on your shape.

Step B

Explain how your line shows the symmetry of your shape.

18 The table below shows the amount of rain that fell during each month of 2002 in Livermore, California.

Rainfall in Livermore in 2002

Month	Rainfall (in inches)
January	0.72
February	0.62
March	1.65
April	0.16
May	0.68
June	0.00
July	0.00
August	0.00
September	0.00
October	0.00
November	2.65
December	7.01

What was the mean amount of monthly rainfall, rounded to the nearest hundredth of an inch, in Livermore in 2002?

Ⓐ 0.00 inches

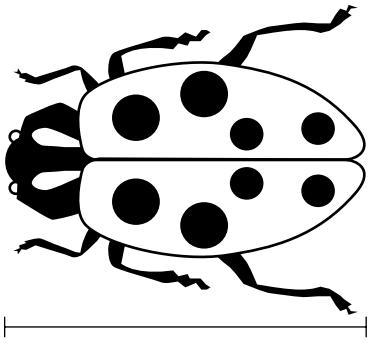
Ⓑ 0.39 inches

Ⓒ 1.12 inches

Ⓓ 1.93 inches

19  Use the centimeter side of your ruler to help you solve this problem.

Look at the picture of the bug below.



What is the length of the bug?

Ⓐ 4.5 centimeters

Ⓑ 4.8 centimeters

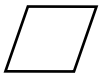
Ⓒ 5.0 centimeters

Ⓓ 5.2 centimeters

20 Look at the pattern of shapes below.

If the pattern continues, what will be the 7th shape?

Ⓐ 

Ⓒ 

Ⓑ 

Ⓓ 

STOP

Mathematics Grade 6 Released Item Book

Wisconsin Department of Public Instruction
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